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Notice of Allowability

Application No.

10/798,244

Applicant(s)

ALBASINI ET AL.

Examiner

Linh M. Nguyen

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 08/11/05.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

This is a reply to the Applicant's amendment submitted on 08/11/2005. According to this amendment, claims 20-28 are newly added; and thus, claims 1-28 are currently presented in the instant application.

Allowable Subject Matter

1. Claims 1-28 are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:
3. The closest prior art fails to disclose or fairly suggest:

a) A phase-locked loop circuit including a means for selectively applying a control signal and a conditioning signal to an energy accumulation means, in combination with the remaining claimed limitations, as called for in independent claim 1;

b) A method of providing an output signal having a frequency depending on the frequency of a reference signal, the method comprising the steps of accumulating energy provided by the control signal and the conditioning signal *responsive* to a first phase of the *reference signal*, and transferring the accumulated energy for controlling the frequency of the output signal *responsive* to a second phase of the *reference signal*, in combination with the remaining claimed limitations, as called for in independent claim 10;

c) A phase-locked loop circuit for providing an output signal having a frequency depending on the frequency of a reference signal including a plurality of energy storage legs connected to the intermediate node and controlled by respective bits of a digital compensation signal, each energy storage leg being structured to store charge during a first phase if the bit

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controlling the energy storage leg is active and output the stored charge during a second phase, in combination with the remaining claimed limitations, as called for in independent claim 11; and

d) A fractional phase-locked loop circuit for synthesizing an output signal having a frequency depending on a multiplication of a frequency of a reference signal by a fractional conversion factor, the circuit including means for deriving a feedback signal from the output signal that includes means for dividing the frequency of the output signal by a dividing ratio being modulated to provide the conversion factor on the average, and means for providing a first conditioning signal for compensating a phase error caused by the modulation of the dividing ratio, the control signal consisting of a series of pulses modulated according to a first technique and the first conditioning signal consisting of a series of pulses modulated according to a second technique, in combination with the remaining claimed limitations, as called for in independent claim 23.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749. The examiner can normally be reached on Alternate Fri, Monday - Thursday from 7:00 to 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh M. Nguyen
Primary Examiner
Art Unit 2816

LMN

A handwritten signature in dark ink, appearing to read 'Linh M. Nguyen', followed by a long horizontal line extending to the right.